PATENT APPLICATION: US/09/623,828

DATE: 06/14/2001 TIME: 10:12:06

Input Set : A:\50146.004002.SEQLIST.TXT
Output Set: N:\CRF3\06142001\1623828.raw

```
4 <110> APPLICANT: Schweighoffer, Fabien
              Bracco, Laurent
              Tocque, Bruno
      8 <120> TITLE OF INVENTION: Qualitative Differential Screening
     11 <130> FILE REFERENCE: 50146/004002
     13 <140> CURRENT APPLICATION NUMBER: 09/623,828
                                                                           Does Not Comply
                                                                       Corrected Diskette Needed
     14 <141> CURRENT FILING DATE: 2000-11-30
     16 <150> PRIOR APPLICATION NUMBER: PCT/FR99/00547
     17 <151> PRIOR FILING DATE: 1999-03-11
     19 <160> NUMBER OF SEQ ID NOS: 16
     21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 23
     25 <212> TYPE: DNA
     26 <213> ORGANISM: Artificial Sequence
     28 <220> FEATURE:
     29 <223> OTHER INFORMATION: (Oligo)
     31 <221> NAME/KEY: misc_feature
     32 <222> LOCATION: 13-19, 23
     33 <223> OTHER INFORMATION: n = A, T, C \text{ or } G
     35 <400> SEQUENCE: 1
                                                                             23
W--> 36 gagaagcgtt athnhnnnna ggn
     38 <210> SEQ ID NO: 2
                                                          Not a valid (223) response. What is the source of the
     39 <211> LENGTH: 24
     40 <212> TYPE: DNA
     41 <213> ORGANISM: Artificial Sequence
                                                         genetic material making up
the artificial sequences?

See # 11 on the Error
     43 <220> FEATURE:
     44 <223> OTHER INFORMATION: Oligo
     46 <221> NAME/KEY: misc_feature
     47 <222> LOCATION: 13-20
     48 <223> OTHER INFORMATION: n = A, T, C or G
     50 <400> SEQUENCE: 2
W--> 51 gagaagcgtt atnnnnnnn tccc
     53 <210> SEQ ID NO: 3
     54 <211> LENGTH: 23
                                                            ummary Sheet
     55 <212> TYPE: DNA
     56 <213> ORGANISM: Artificial Sequence
     58 <220> FEATURE:
     59 <223> OTHER INFORMATION: Oligo
     61 <221> NAME/KEY: misc_feature
     62 <222> LOCATION: (13)...(23)
     63 <223> OTHER INFORMATION: n = A, T, C or G
     65 <400> SEQUENCE: 3
W--> 66 gagaagcgtt atnnnnnnn nnn
     68 <210> SEQ ID NO: 4
     69 <211> LENGTH: 20
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70 <212> TYPE: DNA

DA1E: 06/14/2001

PATENT APPLICATION: US/09/623,828

TIME: 10:12:06

Input Set: A:\50146.004002.SEQLIST.TXT
Output Set: N:\CRF3\06142001\1623828.raw

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71 <213> ORGANISM: Artificial Sequence
    73 <220> FEATURE:
    74 <223> OTHER INFORMATION: Oligo
    76 <221> NAME/KEY: misc_feature
    77 <222> LOCATION: (13)...(17)
    78 <223> OTHER INFORMATION: n = A, T, C or G
    80 <400> SEQUENCE: 4
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    83 <210> SEQ ID NO: 5
    84 <211> LENGTH: 66
    85 <212> TYPE: DNA
    86 <213> ORGANISM: Homo sapiens
    88 <400> SEQUENCE: 5
    89 ccacacctgg ccagtatgtg ctcactggct tgcagagtgg gcagccagcc taagcatttg 60
    90 cactgg
    92 <210> SEQ ID NO: 6
    93 <211> LENGTH: 23
    94 <212> TYPE: DNA
    95 <213> ORGANISM: Artificial Sequence
                                                    500 p.1
    97 <220> FEATURE:
    98 <223> OTHER INFORMATION: Oligo
    100 <400> SEQUENCE: 6
                                                                       23
    101 gggacctgtt tgacatgaag ccc
    103 <210> SEQ ID NO: 7
    104 <211> LENGTH: 22
    105 <212> TYPE: DNA
    106 <213> ORGANISM: Artificial Sequence
    108 <220> FEATURE:
    109 <223> OTHER INFORMATION: Oligo
    111 <400> SEQUENCE: 7
    112 cagtttccgc tccacaggtt gc
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    114 <210> SEQ ID NO: 8
    115 <211> LENGTH: 96
    116 <212> TYPE: DNA
    117 <213> ORGANISM: Homo sapiens
    119 <400> SEQUENCE: 8
    120 gtacgggaga gcacgaccac acctggccag tatgtgctca ctggcttgca gagtgggcag 60
    121 cctaagcatt tgctactggt ggaccctgag ggtgtg
    123 <210> SEQ ID NO: 9
    124 <211> LENGTH: 441
    125 <212> TYPE: PRT
    126 <213> ORGANISM: Homo sapiens
    128 <400> SEQUENCE: 9
    129 Met Asn Lys Leu Ser Gly Gly Gly Gly Arg Arg Thr Arg Val Glu Gly
                                                             15
    131 Gly Gln Leu Gly Glu Glu Trp Thr Arg His Gly Ser Phe Val Asn
                                      25
           20
                                                 30 . .
    133 Lys Pro Thr Arg Gly Trp Leu His Pro Asn Asp Lys Val Met Gly Pro
    134 35 45
```

RAW SEQUENCE LISTING DATE: 06/14/2001 PATENT APPLICATION: US/09/623,828 TIME: 10:12:06

Input Set: A:\50146.004002.SEQLIST.TXT
Output Set: N:\CRF3\06142001\1623828.raw

135 136	_	Val 50	Ser	Tyr	Leu	Val	Arg 55	Tyr	Met	Gly	Tys	Val 60	Glu	Val	Leu	Gln
137 138		Met	Arg	Ala	Leu	Asp 70	Phe	Asn	Thr	Arg	Thr 75	Gln	Val	Thr	Arg	Glu 80
139 140	Ala	Ile	Ser	Leu	Val 85	Cys	Glu	Ala	Val	Pro 90	Gly	Ala	Lys	Gly	Ala 95	Thr
141 142	Arg	Arg	Arg	Lys 100	Pro	Cys	Ser	Arg	Pro 105	Leu	Ser	Ser	Ile	Leu 110	Gly	Arg
143 144	Ser	Asn	Leu 115	Lys	Phe	Ala	Gly	Met 120	Pro	Ile	Thr	Leu	Thr 125	Val	Ser	Thr
145 146		Ser 130	Leu	Asn	Leu	Met	Ala 135	Ala	Asp	Cys	Lys	Gln 140	Ile	Ile	Ala	Asn
	His 145	His	Met	Gln	Ser	Ile 150	Ser	Phe	Ala	Ser	Gly 155	Gly	Asp	Pro	Asp	Thr 160
149 150	Ala	Glu	Tyr	Val	Ala 165	Tyr	Val	Ala	Lys	Asp 170	Pro	Val	Asn	Gln	Arg 175	Ala
151 152	Cys	His	Ile	Leu 180	Glu	Cys	Pro	Glu	Gly 185	Leu	Ala	Gln	Asp	Val 190	Ile	Ser
153 154	Thr	Ile	Gly 195	Gln	Ala	Phe	Glu	Leu 200	Arg	Phe	Lys	Gln	Tyr 205	Leu	Arg	Asn
155 156	Pro	Pro 210	Lys	Leu	Val	Thr	Pro 215	His	Asp	Arg	Met	Ala 220	Gly	Phe	Asp	Gly
	Ser 225	Ala	Trp	Asp	Glu	Glu 230	Glu	Glu	Glu	Pro	Pro 235	Asp	His	Gln	Tyr	Tyr 240
160		_			245	_			Pro	250					255	
162				260					Gly 265					270		
163 164	Asn	Ala	Gln 275	Thr	Pro	Ser	His	Leu 280	Gly	Ala	Thr	Leu	Pro 285	Val	Gly	Gln
166		290	_	_	_		295		Arg	_		300				
168	305					310			Asp		315					320
170					325				Ala	330					335	
172				340		_			Pro 345	_				350		
174			355	_			-	360	Pro				365			
176		370					375			_		380				Ser
178	385					390					395					Val 400
180		• ••			405	,				410	-			i= () •	415	
182				420					425	Ser	Ala	Gly	Ser	Glu 430	Leu	Cys
183	Leu	Gln	GIn	Pro	val	GLU	Arg	гля	Leu	70			, š.			

DATE: 06/14/2001 TIME: 10:12:06

PATENT APPLICATION: US/09/623,828

Input Set : A:\50146.004002.SEQLIST.TXT Output Set: N:\CRF3\06142001\1623828.raw

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440
            435
184
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188 <211> LENGTH: 1326
189 <212> TYPE: DNA
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192 <400> SEQUENCE: 10
193 atgaacaagc tgagtggagg cggcgggcgc aggactcggg tggaaggggg ccagcttggg 60
194 ggcgaggagt ggacccgcca cgggagcttt gtcaataagc ccacgcgggg ctggctgcat 120
195 cccaacgaca aagtcatggg acccggggtt tcctacttgg ttcggtacat gggttgtgtg 180
196 gaggteetee agteaatgeg tgeeetggae tteaacacce ggaeteaggt caccagggag 240
197 gccatcagtc tggtgtgtga ggctgtgccg ggtgctaagg gggcgacaag gaggagaaag 300
198 ccctgtagcc gcccgctcag ctctatcctg gggaggagta acctgaaatt tgctggaatg 360
199 ccaatcactc tcaccgtctc caccagcagc ctcaacctca tggccgcaga ctgcaaacag 420
200 atcatcgcca accaccacat gcaatctatc tcatttgcat ccggcgggga tccggacaca 480
201 gccgagtatg tcgcctatgt tgccaaagac cctgtgaatc agagagcctg ccacattctg 540
202 gagtgtcccg aagggcttgc ccaggatgtc atcagcacca ttggccaggc cttcgagttg 600
203 cgcttcaaac aatacctcag gaacccaccc aaactggtca cccctcatga caggatggct 660
204 ggctttgatg gctcagcatg ggatgaggag gaggaagagc cacctgacca tcagtactat 720
205 aatgacttcc cggggaagga accecettg gggggggtgg tagacatgag gettegggaa 780
206 ggagccgctc caggggctgc tcgacccact gcacccaatg cccagacccc cagccacttg 840
207 ggagctacat tgcctgtagg acagcctgtt gggggagatc cagaagtccg caaacagatg 900
208 ccacctccac caccctgtcc aggcagagag ctttttgatg atccctccta tgtcaacgtg 960
209 cagaacctag acaaggeeeg geaageagtg ggtggtgetg ggeeeeceaa teetgetate 1020
210 aatggcagtg cacceeggga cetgtttgac atgaageeet tegaagatge tettegggtg 1080
211 cctccacctc cccagtcggt gtccatggct gagcagctcc gaggggagcc ctggttccat 1140
212 gggaagetga geeggeggga ggetgaggea etgetgeage teaatgggga ettettggtt 1200
213 cggactaagg atcaccgctt tgaaagtgtc agtcacctta tcagctacca catggacaat 1260
214 cacttgccca tcatctctgc gggcagcgaa ctgtgtctac agcaacctgt ggagcggaaa 1320
215 ctgtga
217 <210> SEQ ID NO: 11
218 <211> LENGTH: 19
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: (Oligo
225 <400> SEQUENCE: 11
226 tgcccaaatc aacaagagc
                                                  See p.1
228 <210> SEQ ID NO: 12
229 <211> LENGTH: 19
230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION:/Oligo
236 <400> SEQUENCE: 12
237 cccctgacaa gcctgaata
239 <210> SEQ ID NO: 13
240 <211> LENGTH: 24
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
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DATE: 06/14/2001

PATENT APPLICATION: US/09/623,828

TIME: 10:12:06

Input Set : A:\50146.004002.SEQLIST.TXT Output Set: N:\CRF3\06142001\1623828.raw

244 <220> FEATURE: 245 <223> OTHER INFORMATION: Oligo 247 <400> SEQUENCE: 13 248 atgtctcaga gcaaccggga gctg 250 <210> SEQ ID NO: 14 251 <211> LENGTH: 24 252 <212> TYPE: DNA	24
253 <213> ORGANISM: Artificial Sequence	
255 <220> FEATURE:	
256 <223> OTHER INFORMATION: Qligo /	
258 <400> SEQUENCE: 14	24
239 glggclccat ccaccgcggg goog	24
261 <210> SEQ ID NO: 15	
262 <211> LENGTH: 19	
263 <212> TYPE: DNA	
264 <213> ORGANISM: Artificial Sequence	
266 <220> FEATURE:	
267 <223> OTHER INFORMATION: Oligo	
269 <400> SEQUENCE: 15 270 tgccaagaag ggaaggagt	19
270 tgccaagaag ggaaggagt / 272 <210> SEQ ID NO: 16	
273 <211> LENGTH: 20	
274 <212> TYPE: DNA	
275 <213> ORGANISM: Artificial Sequence	
277 <220> FEATURE:	
278 <223> OTHER INFORMATION: Oligo	
280 <400> SEQUENCE: 16	20
281 tgtcatgact ccagcaatag	20

## VERIFICATION SUMMARY

DATE: 06/14/2001

PATENT APPLICATION: US/09/623,828

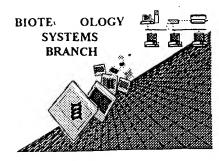
TIME: 10:12:07

Input Set : A:\50146.004002.SEQLIST.TXT
Output Set: N:\CRF3\06142001\1623828.raw

L:36 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:66 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

Mail to Applicant

## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	09/623,828	TECEIVED
Application Schai Ivaliloon		JUL 0 9 2001
Source:	1656	TECH CENTER 1600/2900
Date Processed by STIC:	6-14-01	0=1172111000/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 c-mail help: <a href="mailto:patin21help@uspto.gov">patin21help@uspto.gov</a> or phone 703-306-4119 (R. Wax) PATENTIN 3.0 c-mail help: <a href="mailto:patin3help@uspto.gov">patin3help@uspto.gov</a> or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

## Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

## Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: $09/623$ , 82
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWAR
	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
I0Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown o is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." (Please explain source of genetic material in <220> to <223> section.) (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.